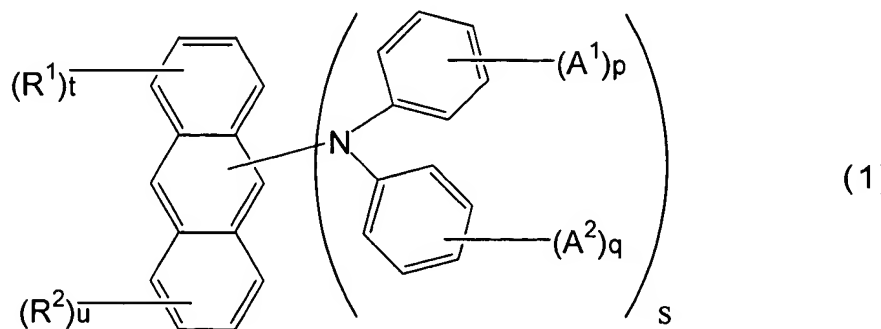


REMARKS

Claims 1-12, as amended, remain herein. Claims 6-8 remain herein but are currently withdrawn from consideration. Claim 1 has been amended. Support for the amendment may be found throughout the specification (see, e.g., Example 1 to 4 and compounds (6) to (11) at page 11 of the specification).

Claims 1-5 and 9-12 were rejected under 35 U.S.C. § 103(a) over Enokida et al. U.S. Patent 5,759,444 and U.S. Patent 6,251,531.

Applicants' claim 1 recites an aromatic amine derivative represented by the following general formula (1):



wherein  $A^1$  and  $A^2$  are each independently a hydrogen atom, a substituted or unsubstituted alkyl group having 1 to 10 carbon atoms, a substituted or unsubstituted aryl group having 5 to 50 nuclear carbon atoms, a substituted or unsubstituted cycloalkyl group having 3 to 20 nuclear carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 10 carbon atoms, a substituted or unsubstituted aryloxy group having 5 to 50 nuclear carbon atoms, a substituted or unsubstituted arylamino group having 5 to 50 nuclear carbon atoms, a substituted or unsubstituted alkylamino group having 1 to 10 carbon atoms, or a halogen atom;  $p$  and  $q$  are each

an integer of 1 to 5 and s is an integer of 1 to 9 wherein when p or q is 2 or more, a plurality of A<sup>1</sup> or A<sup>2</sup> groups may be the same or different and may be bonded to each other to form an saturated or unsaturated ring, with the proviso that both of A<sup>1</sup> and A<sup>2</sup> are not simultaneously hydrogen atoms;

R<sup>1</sup> is a substituted or unsubstituted secondary or tertiary alkyl group having 3 to 10 carbon atoms, or a substituted or unsubstituted secondary or tertiary cycloalkyl group having 3 to 10 carbon atoms; t is an integer among 1 to 9, and when t is 2 or more, a plurality of R<sup>1</sup> groups may be the same or different;

R<sup>2</sup> is a substituted or unsubstituted alkyl group having 1 to 10 carbon atoms, a substituted or unsubstituted aryl group having 5 to 50 nuclear carbon atoms, a substituted or unsubstituted cycloalkyl group having 3 to 20 nuclear carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 10 carbon atoms, a substituted or unsubstituted aryloxy group having 5 to 50 nuclear carbon atoms, a substituted or unsubstituted arylamino group having 5 to 50 nuclear carbon atoms, a substituted or unsubstituted alkylamino group having 1 to 10 carbon atoms, or a halogen atom; u is an integer among 0 to 8 and when u is 2 or more, a plurality of R<sup>2</sup> groups may be the same or different;

a sum of s, t and u ( $s + t + u$ ) is an integer among 2 to 10; and

a sum of t and u ( $t + u$ ) is an integer of 2 or more.

Applicants' claimed compounds are not obvious in view of Enokida. The Office Action states that Enokida discloses a genus of compounds which encompasses applicants' claimed compounds. However, the fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a prima facie case of obviousness. See In re Baird, 16

F.3d 380, 382 (Fed. Cir. 1994); MPEP 2144.08. Alleged obviousness, based on structural similarity, is rebuttable by proof that the claimed compounds possess unexpectedly advantageous or superior properties. MPEP § 2144.09(VII) (citing In re Papesch, 315 F.2d 381 (C.C.P.A. 1963) and In re Wiechert, 370 F.2d 927 (C.C.P.A. 1967)).

Applicant's claimed compounds require that a sum of t and u (t + u) is an integer of 2 or more, i.e., that the anthracene ring includes at least two R<sup>1</sup> and/or R<sup>2</sup> substituents. None of Enokida's exemplified compounds discloses at least two R<sup>1</sup> and/or R<sup>2</sup> substituents on the anthracene ring. Applicants' specification explains that:

In the aromatic amine derivatives represented by the general formula (1) according to the present invention, since the substituted anthracene structure is bonded to the amine structure substituted with benzene rings having substituent groups, the association between the compounds is prevented, resulting in a prolonged life thereof. In addition, since the anthracene skeleton has bulky substituent groups such as secondary or tertiary alkyl or cycloalkyl groups, the anthracene structure exhibits a large steric repulsion against the amine structure, so that properties of these compounds such as life can be further improved. Further, the aromatic amine derivatives have a strong fluorescence in a solid state, and are excellent in field light emission, which leads to a fluorescent quantum efficiency as high as 0.3 or more. In addition, the aromatic amine derivatives of the present invention exhibit not only excellent capabilities of injecting holes from the metal electrode or organic thin film layers and transporting the holes, but also excellent capabilities of injecting electrons from the metal electrode or organic thin film layers and transporting the electrons, and are, therefore, usefully usable as light emitting materials for organic EL devices. Besides, the aromatic amine derivatives of the present invention may be used together with other hole transporting materials, electron transporting materials or doping materials.

Applicants' specification, page 17, lines 1-20 (emphasis added here).

Thus, applicants' claimed compounds are not obvious in view of Enokida. Organic electroluminescence devices using applicants' claimed compounds exhibit high luminance and high efficiency of light emission, and have a long life. Applicants' specification shows that 2-methyl-9,10-bis(diphenylamino)anthracene, which corresponds to Enokida's Comparative

Example 2 and which includes only one R<sup>1</sup> and/or R<sup>2</sup> substituent, exhibits lower efficiency of light emission (8 cd/A versus 19 cd/A for Example 2), lower luminance (805 cd/m<sup>2</sup> versus 1914 cd/m<sup>2</sup> for Example 2) and lower half life (700 h versus 4000 h for Example 2) than applicants' compound (9) (Example 2) (see Comparative Example 2 and Example 2 at pages 28-30 of the specification).

For the foregoing reasons, Enokida does not disclose all elements of applicant's claimed invention, and further discloses nothing that would have suggested applicant's claimed invention, or its surprising attendant advantages, to one of ordinary skill in the art. Furthermore, there is no disclosure or teaching in Enokida, or otherwise in this record, that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicant's presently claimed invention. For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of this rejection and allowance of all claims.

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Docket No.: 28955.4034

Accordingly, this application is now fully in condition for allowance and a notice to that effect is respectfully requested. The PTO is hereby authorized to charge/credit any fee deficiencies or overpayments to Deposit Account No. 19-4293 (Order No. 28955.4034). If further amendments would place this application in even better condition for issue, the Examiner is invited to call applicants' undersigned attorney at the number listed below.

Respectfully submitted,

STEPTOE & JOHNSON LLP

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Roger W. Parkhurst  
Reg. No. 25,177  
Houda Morad  
Reg. No. 56,742

STEPTOE & JOHNSON LLP  
1330 Connecticut Avenue, NW  
Washington, DC 20036  
Tel: 202-429-3000  
Fax: 202-429-3902